

Claims

1. A coil assembly, comprising:
  - a spool;
  - at least one wire wound around the spool;
  - a coil established around the spool by the wire;
  - at least one spool terminal extending from the spool, at least a portion of the wire being wound around the spool terminal;
  - a connector housing coupled to the spool; and
  - at least one connector terminal extending from the connector housing, at least a portion of the connector terminal being adjacent to at least a portion of the spool terminal and electrically connected thereto.
2. The coil assembly of Claim 1, further comprising:
  - at least a first arm extending from the connector terminal such that it flanks the spool terminal.
3. The coil assembly of Claim 2, further comprising:
  - at least a second arm extending from the connector terminal such that it flanks the spool terminal.

4. The coil assembly of Claim 3, wherein the spool terminal is between the first and second arms.

5. The coil assembly of Claim 4, wherein the spool defines a top and the spool terminal extends perpendicularly from the top of the spool.

6. The coil assembly of Claim 5, wherein the connector housing defines a top and the connector terminal comprises:

a lower connector terminal portion extending perpendicularly from the top of the connector housing;

a lateral connector terminal portion extending perpendicularly from the lower connector terminal portion toward the spool; and

an upper connector terminal portion extending perpendicularly from the lateral connector terminal portion such that it is parallel and adjacent to the spool terminal.

7. The coil assembly of Claim 6, wherein the first arm and the second arm extend perpendicularly from the upper connector terminal portion at least partially around the spool terminal.

8. The coil assembly of Claim 7, wherein the spool terminal is electrically connected to the connector terminal by one of the following: resistance welding and soldering.

9. The coil assembly of Claim 4, wherein the spool defines a top and the spool terminal comprises:

a lower spool terminal portion that extends perpendicularly from the top of the spool; and

an upper spool terminal portion that extends perpendicularly from the lower spool terminal portion toward the connector housing.

10. The coil assembly of Claim 9, wherein the connector housing defines a top and the connector terminal comprises:

a lower connector terminal portion that extends perpendicularly from the top of the connector housing; and

an upper connector terminal portion that extends perpendicularly from the lower connector terminal portion such that it is parallel and adjacent to the spool terminal.

11. The coil assembly of Claim 10, wherein the first arm and the second arm extend perpendicularly from the upper connector terminal portion at least partially around the spool terminal.

12. The coil assembly of Claim 11, wherein the spool terminal is electrically connected to the connector terminal by one of the following: resistance welding and soldering.

13. The coil assembly of Claim 1, wherein the spool defines a top and the spool terminal extends perpendicularly from the top of the spool.

14. The coil assembly of Claim 11, wherein the connector housing defines a top and the connector terminal comprises:

a lower connector terminal portion extending perpendicularly from the top of the connector housing;

a lateral connector terminal portion extending perpendicularly from the lower connector terminal portion toward the spool; and

an upper connector terminal portion extending perpendicularly from the lateral connector terminal portion such that it is parallel and adjacent to the spool terminal.

15. The coil assembly of Claim 14, wherein the spool terminal is electrically connected to the connector terminal by one of the following: resistance welding and soldering.

16. A terminal assembly, comprising:
- at least one electrical device;
  - at least one electrical device terminal extending from the electrical device;
  - at least one wire wound at least partially around the electrical device terminal;
  - at least one connector device coupled to the electrical device; and
  - at least one connector device terminal extending from the connector device, at least a portion of the connector device terminal being adjacent to at least a portion of the electrical device terminal and electrically connected thereto.

17. The terminal assembly of Claim 16, further comprising:

at least a first arm extending from the connector device terminal such that it flanks the electrical device terminal.

18. The terminal assembly of Claim 17, further comprising:

at least a second arm extending from the connector device terminal such that it flanks the electrical device terminal.

19. The terminal assembly of Claim 18, wherein the electrical device terminal is at least partially between the first and second arms.

20. The terminal assembly of Claim 19, wherein the electrical device terminal is at least partially resistance welded to the first and second arms.

21. The terminal assembly of Claim 19, wherein the electrical device terminal is at least partially soldered to the first and second arms.